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4348

July 1, 2002

Mr. Johnny Reising
U.S. DOE FEMP
P.O. Box 398705
Cincinnati, OH 45329-8705

RE: 2001 SITE ENVIRONMENTAL REPORT

Dear Mr. Reising:

Ohio EPA has reviewed DOE's *2001 Site Environmental Report (May 2002).* Ohio EPA's comments are enclosed.

If there are any questions, please contact me at (937) 285-6466 or Donna Bohannon at (937) 285-6543.

Sincerely,

Donna Bohannon for Joe

Thomas A. Schneider
Fernald Project Manager
Office of Federal Facilities Oversight

cc: Jim Saric U.S. EPA
Terry Hagen, Fluor Daniel Fernald
Mary Wojceichowski, Tetratech
Ruth Vandegrift, ODH
Mark Schupe, HSI Geotrans

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2001 SITE ENVIRONMENTAL REPORT

1. Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: Attachment A.1 Pg.#: A.1-3 Line #: 24 Code: C
Original Comment #:
Comment: The text indicates that there was an "up, significant" trend for potassium concentrations in Monitoring Well 2625 for 2001. This well, however, has not been sampled since May, 2000. No statements regarding the 2001 trend in potassium concentrations at this well, therefore, are appropriate.

2. Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: Attachment A.1 Pg.#: A.1-4 Line #: 21 Code: C
Original Comment #:
Comment: The trace levels of volatile organic compounds observed in Monitoring Wells 2128, 2898, and 2899 are suggested to be laboratory contaminants. Were these compounds detected in the associated laboratory quality control samples? Ethylbenzene is not a typical laboratory contaminant but can be introduced to field samples through exposure to ambient atmospheric VOC concentrations present during sample collection (e.g., from generator exhaust). Were these compounds detected in the associated field or trip blanks?

3. Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: Attachment A.2 Pg.#: A.2-3 Line #: 12 Code: C
Original Comment #:
Comment: As noted in the South Field Phase II Design Report recently prepared by DOE (DOE, 2002), the lower observed total uranium concentrations in the aquifer are also likely related to the low water table conditions observed in 2001.

4. Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: Attachment A.2 Pg.#: A.2-4 Line #: 24 Code: C
Original Comment #:
Comment: Agree; it would seem more meaningful to only trend the concentration data from samples collected since the currently active remedial pumping modules began operation (i.e., fourth quarter, 1998).

5. Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: Attachment A.3 Pg.#: A.3-2 Line #: 4 Code: C
Original Comment #:
Comment: Showing the 10-year, uranium-based restoration footprint as calculated for the Baseline Remedial Strategy Report is potentially misleading. The footprint is the calculated capture zone for the baseline remedy consisting of 37 extraction wells and 10 re-injection wells. The baseline remedy will likely never be implemented in its entirety. In addition, the capture

zone was determined using a previous site groundwater model based on outdated boundary conditions. As a result, the footprint is not very relevant or meaningful to the actual remediation being performed. The restoration footprint should be revised based on a more realistic estimation of the actual remedy that will be performed. At a minimum, the footprint should be revised using the updated site model.

6. Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: Attachment A.3 Pg.#: A.3-2 Line #: 9 Code: C
Original Comment #:
Comment: The text indicates that although a small portion of the plume perimeter lies outside of the observed capture zone, the entire plume lies within the 10-year, uranium-based footprint and will, therefore, be captured over the course of the remedy. This statement is misleading because the baseline remedy will likely never be implemented in its entirety and because particle tracking analysis of the current remedial pumping scenario as presented in the South Field Phase II Design Report indicate that complete capture will not be achieved. Figure 1 shows particle tracking results for VAM zoom model layer 12. Portions of the eastern flank of the South Plume are not being captured. Similar results were obtained for layers 11, 10, and 9. The particle tracking was performed by releasing particles along the perimeter of the 30 ug/L plume in each layer and tracking their movement given the flow field created by the proposed remedy. Although groundwater level monitoring data generally support capture of the plume and total uranium concentrations measured in the monitoring wells located east of the South Plume eastern boundary remain very low and show no upward trends, the model-derived capture zones do not indicate that complete capture of the plume is occurring for the current pumping scenario as presented in the South Field Phase II Design Report.

Figure 1. Forward Particle Tracks - VAM Zoomed Model Layer 12

7. Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: Attachment A.4 Pg.#: A.4-5 Line #: 5 Code: C
Original Comment #:
Comment: The list of FRL exceedances for 2000 that were found to be not persistent in 2001 should also include zinc and manganese in Monitoring Well 2430.

8. Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: Attachment A.4 Pg.#: A.4-5 Line #: 19 Code: C
Original Comment #:
Comment: The discussion should note that a correlation may exist between the occurrence of FRL exceedances and sample filtering. For example, zinc in unfiltered samples from Monitoring Well 2430 exceeded the FRL three out of four quarters in 2000. No exceedances occurred in 2001 and all samples were filtered.

9. Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: Attachment A.5 Pg.#: A.5-2 Line #: 16 Code: C
Original Comment #:
Comment: Summing up the monthly flows on Figure A.5-3 indicates a total flow of 1341 gallons for 2001, not 971 gallons as stated in the text.

10. Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: Attachment A.5 Pg.#: A.5-2 Line #: 16 Code: C
Original Comment #:
Comment: Summing up the monthly flows on Figure A.5-5 indicates a total flow of 1329 that were found to be not persistent in 2001 should also include zinc and manganese in Monitoring Well 2430.

11. Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: Attachment A.4 Pg.#: A.4-5 Line #: 19 Code: C
Original Comment #:
Comment: The discussion should note that a correlation may exist between the occurrence of FRL exceedances and sample filtering. For example, zinc in unfiltered samples from Monitoring Well 2430 exceeded the FRL three out of four quarters in 2000. No exceedances occurred in 2001 and all samples were filtered.

12. Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: Attachment A.5 Pg.#: A.5-2 Line #: 16 Code: C
Original Comment #:
Comment: Summing up the monthly flows on Figure A.5-3 indicates a total flow of 1341 gallons for 2001, not 971 gallons as stated in the text.

13. Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: Attachment A.5 Pg.#: A.5-2 Line #: 16 Code: C
Original Comment #:
Comment: Summing up the monthly flows on Figure A.5-5 indicates a total flow of 1329 gallons for 2001, not 1164 gallons as stated in the text. gallons for 2001, not 1164 gallons as stated in the text.